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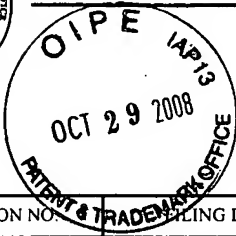
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/695,138

10/27/2003

Zinaida Boltan

6464

7590  
Boltan, Zinaida  
32250 Cannon Road  
Solon, OH 44139

10/20/2008

EXAMINER
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FONSECA, JESSIE T

ART UNIT	PAPER NUMBER
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3633

MAIL DATE	DELIVERY MODE
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10/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/695,138	BOLTAN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	JESSIE FONSECA	3633	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 3 June 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10 and 12-22 is/are pending in the application.
- 4a) Of the above claim(s) 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10 and 13-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

A listing of registered patent attorneys and agents is available on the USPTO Internet web site <http://www.uspto.gov> in the Site Index under "Attorney and Agent Roster." Applicants may also obtain a list of registered patent attorneys and agents located in their area by writing to the Mail Stop OED, Director of the U. S. Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450

### ***Information Disclosure Statement***

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Drawings***

The drawings were received on 4/28/08. These drawings are not acceptable. The proposed replacement drawings include reference numerals that are not legible (i.e. Fig. 1E & 3D). Further, the replacement drawings are fuzzy making it difficult to interpret (i.e. Fig. 3L). As such, the objections to the drawings noted in the Office Action of 1/28/2008 remain and are reiterated below. Further, note the additional drawing objection below.

The drawings are objected to because each of the figures 3D, 3I, 4C, and 4F require bracketing "}". Also, reference numeral "24a" is missing a lead line in each of figures 3G, 3K, and 3L. Further, fig. 4G shows several modified forms/configurations of construction, which must be shown in separate figures.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

The disclosure is objected to because of the following informalities:

Par. 0039, line 1: The sentence describing Fig. 1A to 1F appears incomplete.

Examiner suggests replacing "show Universal" with --shows a Universal--.

Par. 0041: As the description is directed to more than one hard pole, it appears "a" should be deleted.

A period (.) appears to have been inadvertently inserted after several of the figure numbers (i.e. Fig. 1B.) in each of the following paragraphs: 0041- 0045, 0047- 0049, 0051, 0053-0055, 0068-0075.

A space should be inserted between "Fig." and the succeeding figure number in each of the following paragraphs: 0058-0067. Note a period (.) is missing after "Fig" in par. 0059 and a space was inadvertently added between "3" and "I" in par. 0063.

Par. 0076, line 1: It appears "Drawing" should be --Drawings-- as the reference numerals subsequently recited are found in several of the drawing figures. Further, the paragraph lists reference numerals found in the drawings, however, several reference numerals found in the drawings are not listed: 12e, 12f, and 14e.

Par. 0082, lines 3: It appears a space should be inserted between "Fig." and "1D".

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Par. 0083, lines 1: It appears a space should be inserted between "Fig." and "1D".

Par. 0085, Line 1, it appears a space should be inserted between "Fig." and "2A".  
Further in Line 2: A period (.) is missing after "Figs".

Par. 0086, lines 1: It appears a space should be inserted between "Fig." and "3K".

Appropriate correction is required.

### ***Claim Objections***

Claim 17 is objected to because of the following informalities: The claim recites the soft light walls are triangular. However, the shape of the walls as disclosed and the drawings appear to be trapezoidal rather than triangular. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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There is no disclosure, either written or shown, to describe an extension pole adapted for attachment to a distal end of the hand held lever to extend above the umbrella roof. Figs. 2B, 2D, and 2E shows a hand held lever sliding through the roof so as to allow for the capability of a lever extending above the roof, but there is no disclosure including an extension pole extending above a roof by attachment of a pole to the distal end of the hand held lever.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10, 13, 16, and 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Dial (US 1,449,894)

With regards to claim 10: Dial further discloses in combination, a structure, comprising:

a umbrella tent structure which has a frame assembly including a lever (2) with a handle (20), and a plurality of umbrella arms (6) which extend outwardly radially and downward from a distal end of the lever which is spaced from the handle (27) of the lever (2) to free distal ends of the umbrella arms (6), and a soft material umbrella roof (28) which extends from the distal end of the lever (2) and over the umbrella arms (6)



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and to free distal ends of the umbrella arms (6), the umbrella roof terminating at the free distal ends of the umbrella arms (6) (figs. 1 & 2);

three or more hard poles (29) with "special appliances" (22) on first ends of the hard poles adapted for connection to the free distal ends of the umbrella arms (6) of the umbrella tent structure, the hard poles (29) extending downward from the distal ends of the umbrella arms to second ends, which is capable of having contact with a supporting surface;

one or more soft light walls attached to the hard poles (29) and extending downward from the umbrella roof at free distal ends of the umbrella arms (6) and from the umbrella roof and between the hard poles (29) to form an enclosure within the hard poles and with and under the umbrella roof, wherein the umbrella roof and one or more of the soft light walls form a substantially continuous enclosure or barrier supported by the hard poles (29) and the hand held umbrella frame assembly and extending from the distal end of the hand held lever (2) to the second ends of the hard poles (29) (figs. 1-2).

The umbrella tent of Dial having a lever (support) is capable of being hand held by a user. Note that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

With regards to claim 13: Dial further discloses at least two soft light walls between the hard poles (29) extending from the free distal ends of the umbrella arms (6) (figs. 1-2).

With regards to claim 16: Dial further discloses each of the hard poles (29) comprises two or more interconnected telescoping sections whereby a length of each of the hard poles can be changed (fig. 1).

With regards to claim 19: Dial further discloses the hand held lever (2) is comprised of two or more interconnected telescoping sections (2, 27) whereby a length of the hand held lever can be extended to an approximate length of the hard poles (29).

As the telescoping section (27) receives the end of another member (2), the structure as a whole can be broadly interpreted as an interconnected telescoping section. Note as the hard poles are adjusted in length, the telescoping section (27) is capable of receiving the end of another member (2) at different degrees of length.

With regards to claim 20: Dial further discloses an extension pole (27) adapted for attachment to a distal end of the hand held lever. Claim is examined as best understood.

Claims 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Kemp (US 2,059,463).

With regards to claim 21: Kemp discloses in combination, umbrella tent structure, comprising:

a umbrella tent structure (figs. 1-4) which has a frame assembly including a lever (12) with a handle (50) and a plurality of umbrella arms (60) which extend outwardly radially and downward from a distal end of the lever (12) which is spaced from the handle (50), each of the umbrella arms (60) terminating at free distal ends at radial

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points from the distal end of the lever (12) and a soft material umbrella roof (10) which extends over the umbrella arms (60) from the distal end of the lever (12) to each of the free distal ends of the umbrella arms (60). Note the free distal ends of the arms terminate at radial points as they extend from a common center and at a length equal to one another.

the hand held lever (12) further comprising two or more interconnected telescoping sections (50, 51) which extend from the handle to the distal end of the hand held lever (12) whereby a length of the hand held lever can be extended or shortened by relative movement of the interconnected telescoping sections (fig. 5);

three or more "soft pulls" (66) connected to the free distal ends of the umbrella arms (60) of the tent structure (fig. 7), the "soft pulls" extendable downward from the free distal ends of the umbrella arms (60) a distance greater than a length of the lever (12), and an anchor (69) at ends of each of the "soft pulls" (66).

The umbrella tent of Kemp having a lever (support) is capable of being hand held by a user. Note that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

With regards to claim 22: Kemp further discloses the "soft pulls" (66) are attached to and extend from the free distal ends of the umbrella arms (60) which are located approximately ninety degrees apart on the umbrella frame assembly (fig. 2).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dial (US 1,449,894) in view of Greenup (US 2,530,765).

With regards to claim 14: Dial discloses everything previously mentioned including soft walls, but fails to disclose the soft light walls extend between the hard poles and from the umbrella roof along an entire length of the hard poles to extend over substantially all of the area between the hard poles and from the umbrella roof to the second ends of the hard poles.

However, Greenup discloses soft light walls extending the entire length of the hard poles (40, 40a) to extend over substantially all of the area between the hard poles (40, 40a) and from the umbrella roof to the second ends of the hard poles (figs. 1 & 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the walls of Dial to have the soft light walls extend the entire length of the hard poles to extend over substantially all of the area between the hard poles and from the roof to the second ends of the hard poles as taught by Greenup in order to provide an enclosed structure that will allow for privacy and to provide protection from outside conditions (i.e. sunlight, wind, rain, insects, etc.).

With regards to claim 18: Dial discloses everything previously mentioned, but fails to disclose the soft light walls are rectangular in shape.

However, Greenup discloses a structure have soft light walls being rectangular in shape (fig. 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the soft light walls of Dial to extend soft light walls the length of the hard poles and be rectangular in shape as taught by Greenup in order to provide an enclosed structure that will allow for privacy and to provide protection from outside conditions (i.e. sunlight, wind, rain, insects, etc.). To have walls of a particular shape accommodate the framing in which it is placed is considered an obvious matter of design choice. Changing the shape of the soft light walls to accommodate a particular frame is considered within the level of ordinary skill in the art and would not be expected to yield new or unpredictable results.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dial (US 1,449,894) in view of Forget (US 4,033,366)

With regards to claim 15: Dial discloses everything previously mentioned, but fails to disclose the hand held lever is detachable from the umbrella frame assembly.

However, Forget teaches that at the time of the invention it was known that the central support of an umbrella tent may be detachable from the umbrella frame assembly as shown and described with respect to figure 6.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the tend of Dial to have a lever (support, 2) detachable from the frame assembly as taught by Forget in order to provide a central support that can be removed so as to provide an open space within the tent structure when assembled.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dial (US 1,449,894) in view of Hoskins (US 2,928,403).

With regards to claim 17: Dial discloses everything previously mentioned, but fails to disclose the soft light walls are triangular in shape.

However, discloses a structure having a having a soft light walls being "triangular" (trapezoidal) in shape (figs. 1 & 5).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the walls of Dial to include trapezoidal shaped walls that correspond to angled hard poles as taught by Hoskins in order to provide an enclosed structure with greater floor surface area, which allows for privacy. Further, the soft light walls extending the entire length of the hard poles will provide the additional benefits of protection from outside conditions (i.e. sunlight, wind, rain, insects, etc.). To have walls of a particular shape accommodate the framing in which it is placed is considered an obvious matter of design choice. Changing the shape of the soft light walls to accommodate a particular frame is considered within the level of ordinary skill in the art and would not be expected to yield new or unpredictable results.

### ***Response to Arguments***

Applicant's arguments filed 4/28/08 have been fully considered but they are not persuasive.

Applicant argues Dial fails to disclose the claimed combination of a hand held umbrella and poles which extend from distal ends of the umbrella arms to provide an enclosure formed by the roof and "soft light walls". Applicant further argues that Dial does not disclose a "Collapsible Tent" or can be "hand held".

In response, Examiner submits the structure of Dial is collapsible as shown in fig.

4. In response to applicant's arguments that Dial fails to disclose a structure that can be hand held, Examiner's submits applicant's arguments appear to be directed to an intended use of the structure, the structure of Dial is capable of being hand held by a user. Note that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Applicant further argues that Dial discloses no free distal ends on the arms.

Examiner respectfully disagrees; the free distal ends applicant refers to are attached to hard poles via special connectors similar to applicants. As such, Examiner maintains the arms of Dial meet the claimed limitations.

Applicant further argues that Dial fails to disclose "two or more interconnected telescoping sections" and the pedestal 27 of Dial is not disclosed as an "extension

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pole". Examiner submits that Dial discloses a pedestal 27 which receives the end of another member (fig. 2) and is therefore considered telescoping. Note Dictionary.com defines telescoping as "consisting of parts that fit and slide one within another." Further, the pedestal of Dial is considered an extension pole as it is extension of the center support.

Applicant further argues that Kemp fails to disclose "soft pulls" that extend from the distal end of a lever from which the umbrella arms extend as defined by claim 21:"umbrella arms which extend outwardly radially and downward from a distal end of the hand held lever..." In response, Examiner submits that the claims do not recite the "soft pulls" extending from the hand lever, but instead recite the "soft pulls" are connected to free distal ends of the umbrella arms (lines 13-14 of claim 21).

Applicant further argues that Forget fails to disclose "hard poles" which extend from free terminal ends of the umbrella arms. Examiner submits that Forget is not relied on to teach hard poles, but rather to teach that is known in the art to have a detachable hand lever. Applicant's arguments are against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The objection to drawings regarding the claimed feature of at least two walls between each of hard pole (claim 13) has been withdrawn in view of the amendment to the claims filed 6/3/08.



The objection to the abstract has withdrawn in view of the amendment filed 6/3/08.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited is directed to umbrella and/or tent structures.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSIE FONSECA whose telephone number is (571)272-7195. The examiner can normally be reached on M-F 7:30am-4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Canfield can be reached on (571)272-6840. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. F./  
Examiner, Art Unit 3633

/Robert J Canfield/

Supervisory Patent Examiner, Art Unit 3635

<b>Notice of References Cited</b>	Application/Control No. 10/695,138		Applicant(s)/Patent Under Reexamination BOLTAN ET AL.	
	Examiner JESSIE FONSECA		Art Unit 3633	Page 1 of 2

#### U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2,059,463	11-1936	DAVID KEMP	135/98
*	B	US-4,971,090	11-1990	Uhl, Michael	135/98
*	C	US-2,530,765	11-1950	GREENUP ROY T	135/98
*	D	US-2,873,750	02-1959	MCCARTHY JOSEPH W	135/98
*	E	US-4,033,366	07-1977	Forget, Leonel	135/98
*	F	US-941,458	11-1909	Leach	135/98
*	G	US-1,449,894	03-1923	DIAL GEORGE H	135/98
*	H	US-4,202,363	05-1980	Watts et al.	135/98
*	I	US-4,023,582	05-1977	Buzzella et al.	135/15.1
*	J	US-2005/0161069	07-2005	Wu, Chung-Cheng	135/098
*	K	US-D352,759	11-1994	Cantwell, Robert R.	D21/834
*	L	US-4,793,371	12-1988	O'Ferrell et al.	135/160
*	M	US-5,234,011	08-1993	Lynch, James P.	135/99

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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N	DE 4117800 A1 ✓	12-1992	Germany	WENTZEL, HANS DIPL ING	
	O	FR 2835557 A1 ✓	08-2003	France	DALLONGEVILLE, JACQUES	
	P	GB 2036123 A ✓	06-1980	United Kingdom	Lee, Jiunn-Feng	
	Q	GB 2284437 A ✓	06-1995	United Kingdom	UPSHER, DAVID	
	R	GB 2346162 A ✓	08-2000	United Kingdom	KIMBER, ELISABETH	
	S					
	T					

#### NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

<b>Notice of References Cited</b>	Application/Control No. 10/695,138		Applicant(s)/Patent Under Reexamination BOLTAN ET AL.	
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#### U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-39,777	09-1863	Pultan	135/98
*	B	US-1,635,756	07-1927	LEACH ALICE F	135/98
*	C	US-4,327,520	05-1982	Saxby et al.	47/29.1
*	D	US-4,133,341	01-1979	Shaheen, Virginia	135/99
*	E	US-2004/0099299	05-2004	Wu, Chung-Cheng	135/098
*	F	US-2004/0159346	08-2004	Huang, Hsi-Chin	135/098
*	G	US-1,502,898	07-1924	BERG FREDERICK O	135/98
*	H	US-5,333,634	08-1994	Taylor, Delbert	135/98
*	I	US-373,378	11-1887	Rumrille	135/98
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*	K	US-2,864,389	12-1958	SMITH MILTON B; et. al.	135/98
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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

#### NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

**DERWENT-ACC-NO:** 2003-620474

**DERWENT-WEEK:** 200359

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**TITLE:** Circular camping tent has roof  
and walls supported by umbrella-  
type structure with radial arms  
deployed semi-automatically from  
central pole

**INVENTOR:** DALLONGEVILLE J H P

**PATENT-ASSIGNEE:** DALLONGEVILLE J H P[DALLI]

**PRIORITY-DATA:** 2002FR-001473 (February 7, 2002)

**PATENT-FAMILY:**

<b>PUB-NO</b>	<b>PUB-DATE</b>	<b>LANGUAGE</b>
FR 2835557 A1	August 8, 2003	FR

**APPLICATION-DATA:**

<b>PUB-NO</b>	<b>APPL- DESCRIPTOR</b>	<b>APPL-NO</b>	<b>APPL-DATE</b>
FR 2835557A1	N/A	2002FR- 001473	February 7, 2002

**INT-CL-CURRENT:**

<b>TYPE</b>	<b>IPC DATE</b>
CIPS	E04H15/28 20060101

**ABSTRACTED-PUB-NO:** FR 2835557 A1

**BASIC-ABSTRACT:**

NOVELTY - The tent has a covering layer (7) of fabric with doors (9) and windows (10), supported by a series of arms radiating from the top of a central pole (1) and deployed by an umbrella-type mechanism with spokes (4), a spring (13) and a rack (18). The radiating arms have ends that extend downwards to the ground, where they are anchored by pegs (6). The covering material can have an insulated lining (25). The mechanism allows a tent with an external diameter of 5 m and a maximum height of 2.25 m can be folded to about 0.5 m diameter by 1.7 long, or 1.2 m if telescopic arm extensions are used.

USE - Folding camping tent that will fit in the trunk of a car.

ADVANTAGE - Easily pitched and dismantled by one person.

DESCRIPTION OF DRAWING(S) - The drawing shows a cross-section of the tent in side view.

Central pole (1)

Spokes (4)

Pegs (6)

Covering fabric (7)

Doors (9)

Windows (10)

Spring (13)

Rack (18)

Insulated lining (25)

**CHOSEN-DRAWING:** Dwg.2/4

**TITLE-TERMS:** CIRCULAR CAMP TENT ROOF WALL  
SUPPORT UMBRELLA TYPE STRUCTURE  
RADIAL ARM DEPLOY SEMI AUTOMATIC  
CENTRAL POLE

**DERWENT-CLASS:** Q46

**SECONDARY-ACC-NO:**

**Non-CPI Secondary Accession Numbers:** 2003-494359

It appears that the applicant in this application is a *pro se* applicant (an inventor filing the application alone without the benefit of a Patent Attorney or Agent). Applicant may not be aware of the preferred methods of ensuring timely filing of responses to communications from the Office and may wish to consider using the Certificate of Mailing or the Certificate of Transmission procedures outlined below.

### CERTIFICATE OF MAILING

To ensure that the Applicant's mailed response is considered timely filed, it is advisable to include a "certificate of mailing" on at least one page (preferably on the first page) of the response. This "certificate" should consist of the following statement:

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" on (date).

(Typed or printed name of the person signing this certificate)

(signature)

### CERTIFICATE OF TRANSMISSION

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(signature)

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In the event that a communication is not received by the Office, applicant's submission of a copy of the previously mailed or transmitted correspondence showing the **originally** signed Certificate of Mailing or Transmission statement thereon, along with a statement from the person signing the statement which attests to the timely mailing or transmitting of the correspondence, would be sufficient evidence to entitle the applicant to the mailing or transmission date of the correspondence as listed on the Certificate of Mailing or Transmission, respectively.

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(12) UK Patent Application (19) GB (11) 2 036 123 A

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A45F 1/04

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(56) Documents cited  
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GB 469130  
GB 286159

(58) Field of search  
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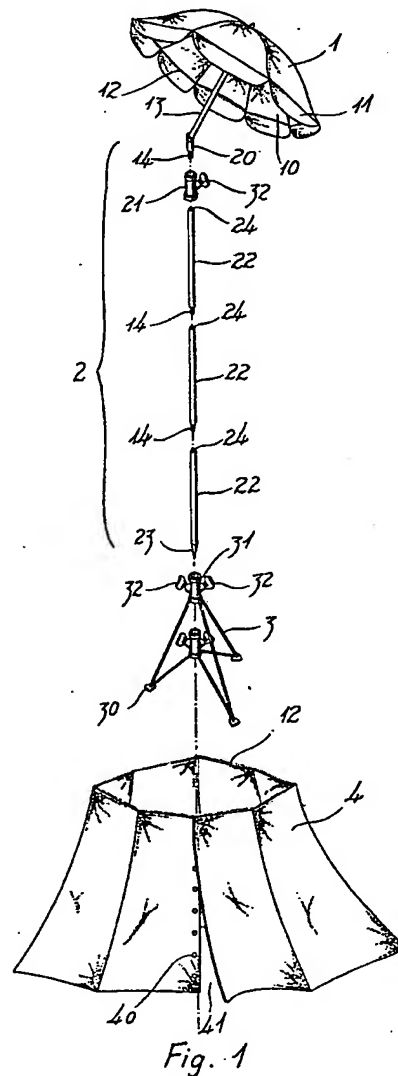
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Company

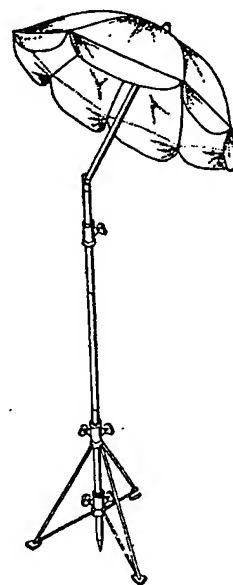
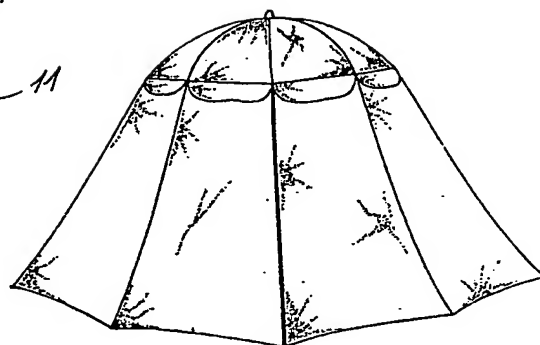
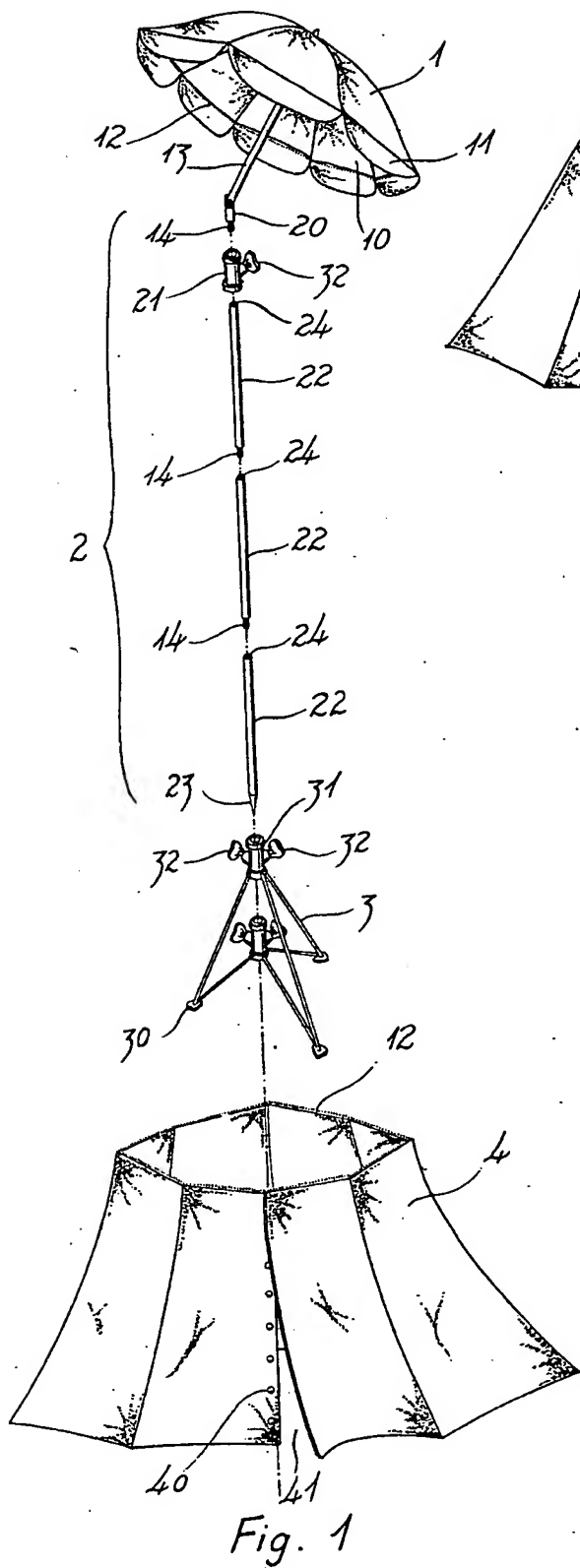
(54) A Dual Purpose Beach Umbrella  
and Tent

(57) The present invention relates to  
a dual purpose beach umbrella

supported by a tripod, and employing  
a sliding fastener to join the periphery  
of the umbrella to a curtain 4 whose  
upper peripheral length 12 is shorter  
than its lower one.



GB 2 036 123 A



# SPECIFICATION

## A Dual Purpose Beach Umbrella

### Background of the Invention

The present invention is to provide a kind of umbrella, particularly a type of parasol that can be used for a camping tent by enclosing the four sides of the umbrella with a curtain to make a simple fast-forming tent for open country or beach camping.

The known parasol often has a long handle sharpened at the lower extremity and a surface larger than ordinary umbrella. When using the parasol, a soft sand ground has to be chosen and the sharpened parasol handle forcibly inserted into the ground. As the sun moves with time, the handle has to be pulled up and inserted again at an angle and in a direction to shade the sunshine. Occasionally, there are parasol handle that has articulate structure installed at suitable portion of the handle to eliminate the trouble of pull up and push down, requiring only the adjustment of the inclination angle and the direction of the upper portion of the handle, but these types of beach umbrella, because of their usage, have long handles and are inconvenient to carry.

Whenever summertime comes, people flock to the beach, if they desire a longer period of stay, they have to have a long range planning under present conditions: make reservation for lodging around the beach area 2 to 3 months in advance. But frequently to make plans for a vacation 2 to 3 months afterwards they encounter limitations and difficulties, so, when vacation comes, because of their persistent interest, they are usually forced to use ordinary camping tent. However, the structure and usage of camping tents are generally fixed, if used in a beach, the tents are all sealed, staying in such tents under the blazing sun is no joy but suffering; besides, the parts of a tent such as ropes, pins, frame and many others make the baggage big and heavy and inconvenient to carry. Because of the reasons mentioned above, ordinary people has either to spend a lot of money for vacation in a beach or stay away from it all the time.

The inventor apprehended the above-mentioned defects, spent many years in thinking and design work and eventually came up with the novel dual purpose beach umbrella which eliminates the above-mentioned defects. It is expected to provide a kind of camping tent that can be used either in a beach or in an open country to promote camping activities and thus to enhance the health of the citizenry.

### Summary of the Invention

The main object of the present invention is to eliminate the defects of the known beach umbrella and tent, to combine the two objects into one, capable of carrying out the functions of both, and to provide a kind of dual purpose beach umbrella that can be used either as a beach umbrella or a camping tent.

The second object of the present invention is to

improve the structure of the beach umbrella, to provide a beach umbrella that can be dismantled using simple method, folded into a small object that can be accommodated in a small baggage convenient to carry.

A further object of the present invention is to reduce the accessories that are needed in building a tent, in addition, to provide a simple method in joining the curtain to the umbrella when the beach umbrella is to be converted into a camping tent. It saves materials and lowers the cost.

### Brief Description of the Drawings

Fig. 1 is an exploded view of the structure of the present invention;

Fig. 2 is an embodiment of the present invention used as a beach umbrella; and

Fig. 3 is an embodiment of the present invention used as a camping tent.

### Detailed Description of the Invention

An embodiment of the present invention together with other characteristic is described in detail with reference to the accompanying drawings.

Referring to Fig. 1 which is an exploded view of the structure of the present invention, wherein the numeral 1 stands for the umbrella, 2 for the main pole, 3 for the tripod and 4 for the curtain. The said umbrella has a polygonal covering surface 10, its periphery is embroidered with a zipper (ZIP is a registered trade mark) side 12, the lower extremity of the umbrella handle has male threads for engagement with the main pole 2. The main pole 2 comprises an articulated rod piece 20, a pole rod 22 that can be divided into a plurality of sections, a sharp pole 23 with one end acutely sharpened (the above three members has male and female threads 14, 24 at the two ends, these parts can be screwed to form the main body of the main pole), and a fixing sleeve 21 which has on its side a horizontal screw hole and that fixes the articulated rod piece by means of a flat top bolt 32, disposed in the screw hole. Tripod 3 comprises a movable supporting stand 30 with three legs and two fixing sleeves 31, each has on its side two flat top bolts 32 that are perpendicular to each other on a horizontal plane. Curtain 4 is formed by sewing a number of trapezoidal sections equal in number to the sides of the umbrella polygon with one or two openings reserved for entrance which are fastened by buttons, and is embroidered with a zipper side 12 on the upper periphery that zips with the zipper side 11 embroidered around the periphery of the umbrella surface. Generally, the umbrella surface fabric 10 and curtain 4 are preferably made of pliable, thin and water-proof fabric made from chemical fibre.

When used as a beach umbrella as shown in Fig. 2, the umbrella of the present invention is opened and screwed to the main pole 2 which is inserted into the fixing sleeve 31 of the tripod 3 and pushed hardly into the sand or earth, then move the fixing sleeves 31 along main pole 2 to

open up the supporting legs, which comes into close contact with the earth surface and finally fasten the flat top bolt 32. Because of the effect of pairing the sharpened rod 23 and the tripod 3, the umbrella can stand firmly on soft sand ground, cement or asphalt surfaces (in the last two cases the main pole does not penetrate the surface), this is a superior characteristic of the present invention. The usage of the articulate rod piece is to make the umbrella inclined at a suitable angle with respect to the vertical axis so the surface facing the sun can attain the maximum sun shading effect, as the sun moves with time, to attain the same effect, simply unscrew the bolts 32 on the tripod 3 and turn the umbrella to the direction facing the sun and screw the bolts 32.

When used as a camping tent as shown in Fig. 3, the umbrella of the present invention is straightened in a vertical direction and used as the top of the tent. Move the fixing sleeve 21 upward along the main rod until it is raised to the articulation of the articulated rod piece 20, screw tightly the flat top bolt 32 to fix the umbrella in an erect position and then zip the zipper side on the upper periphery of the curtain and the other zipper side on the periphery of the umbrella surface and finally, pull out the corners of the curtain and pin them on the ground. The method is easy, both the old and the young can easily assemble or dismantle the device, when used as a beach umbrella, the members and the accessories of the present invention can be dismembered and placed in a hand baggage, and because the device

is light and its volume small, it is convenient to carry.

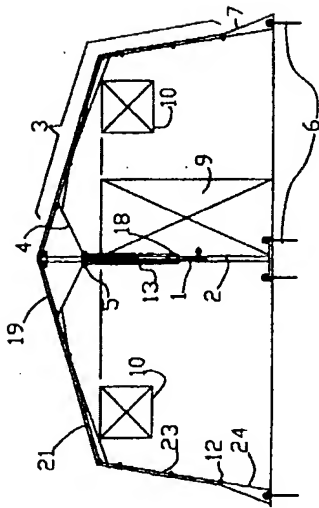
To sum up the above description, the structure of the present invention is simple, the members are few, so a small and light package can be formed after dismantling the members and folding the fabric and gathering them together, and because of the simplicity of the structure the device's cost of production is low, it can be called "low prices and fine wares", everybody can afford it. Its merits include simplicity in using, suitability for both the young and the old and unlimitedness in location of use, indeed, it is an advanced invention of high industrial value.

#### Claims

1. A dual purpose beach umbrella, which can be used also for a tent, comprising mainly an umbrella, a main pole, a tripod and a curtain, wherein the combination of the umbrella and the curtain is achieved by zipping the zipper sides embroidered on the peripheries of both objects.

2. A dual purpose beach umbrella as defined in claim 1, wherein the main pole is formed by screwing a plurality of sections longitudinally, on one end of which is an articulated rod piece and on the other end is a sharpened end, particularly, the said articulated rod piece is fixed by a fixing sleeve.

3. A beach umbrella substantially as hereinbefore described, and illustrated in, the accompanying drawings.



# (12) UK Patent Application (19) GB (11) 2 346 162 (13) A

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(51) INT CL<sup>7</sup>

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(52) UK CL (Edition R )

E1D DTL

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(58) Field of Search

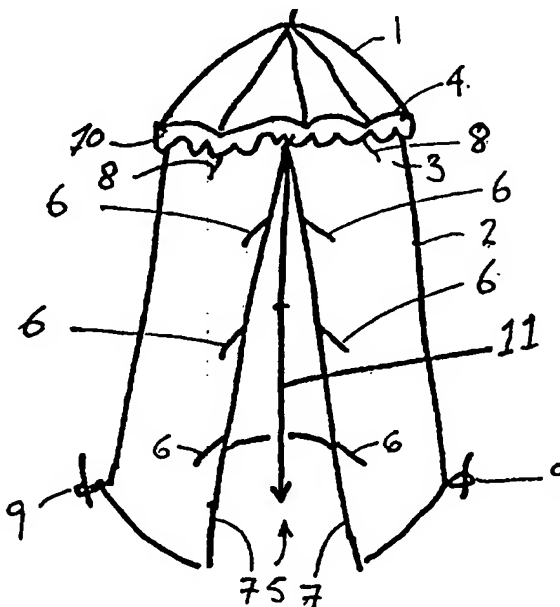
UK CL (Edition R ) E1D DTL  
INT CL<sup>7</sup> E04H 15/28  
EPODOC WPI JAPIO

(54) Abstract Title

Umbrella bathing tent

(57) A bathing tent having a roof formed by an umbrella (1) that can be opened and closed and extendible sides formed by a flexible skirt (2). The upper end of the skirt (2) is attached to the rim (4) of the umbrella and has a gap (5) to provide an entrance to the tent. The gap (5) can be closed, possibly by using multiple tie straps (6). The skirt (2) is brailed up to the peripheral rim of the umbrella when not in use (fig 4, not shown), there possibly being a border or pelmet (10) on the rim (4) of the umbrella (1) to conceal the skirt (2) when brailed up. The lower end of the skirt (2) may be secured to the floor by loops of material (9). The umbrella tent is preferably supported by a shaft (11) driven into the ground, where the shaft (11) can be telescopic or formed from two or more sections screwed together. The shaft may be provided with retractable support legs, struts (fig 7-9, not shown) or secured by a liquid filled collapsable container (figs 10 and 11, not shown). The shaft (11) may also be provided with a collapsable seat or shelf (figs 12 and 13, not shown).

Figure 2



At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

The claims were filed later than the filing date but within the period prescribed by Rule 25(1) of the Patents Rules 1995.

GB 2 346 162 A

Figure 1

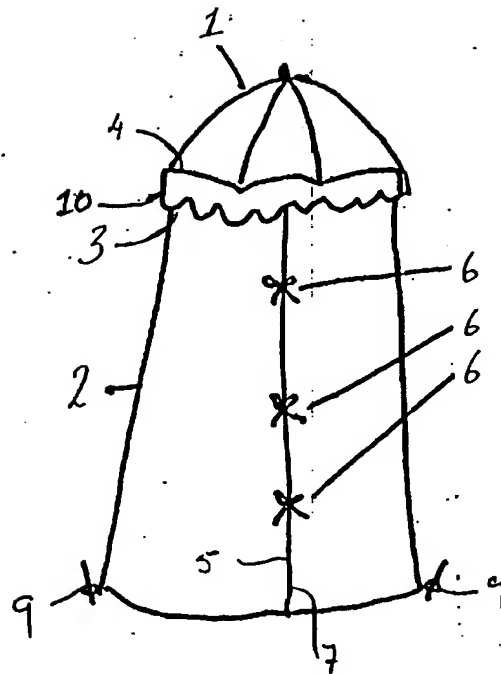


Figure 2

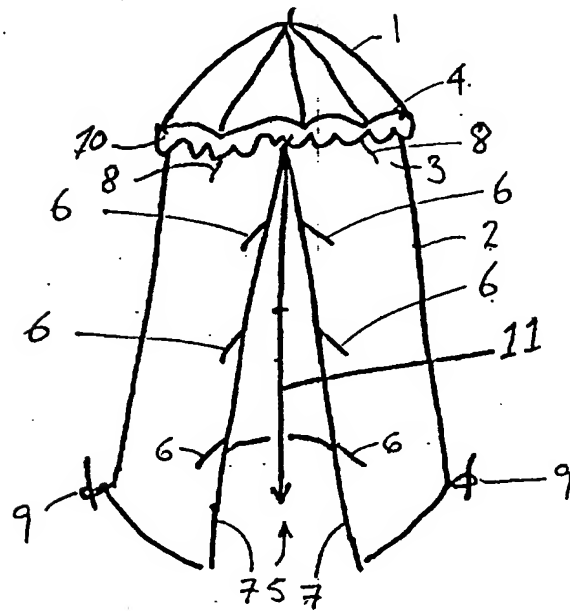
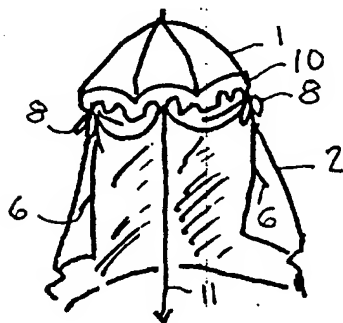


Figure 3



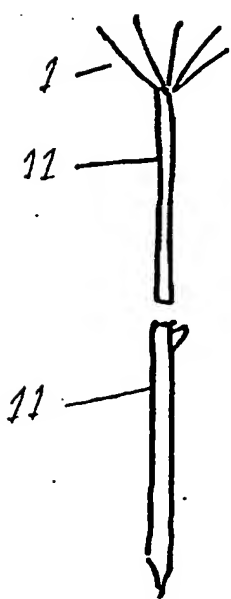
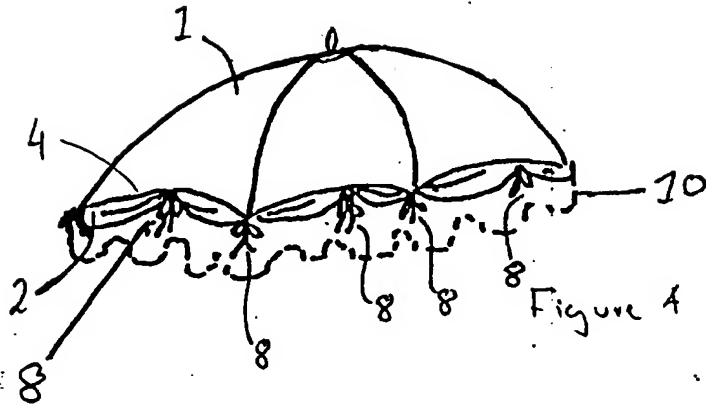


Figure 5

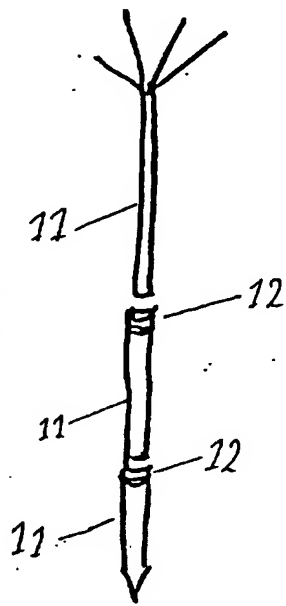


Figure 6

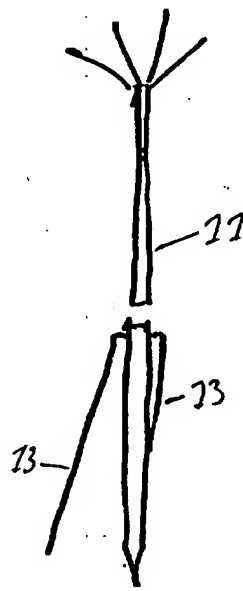


Figure 7

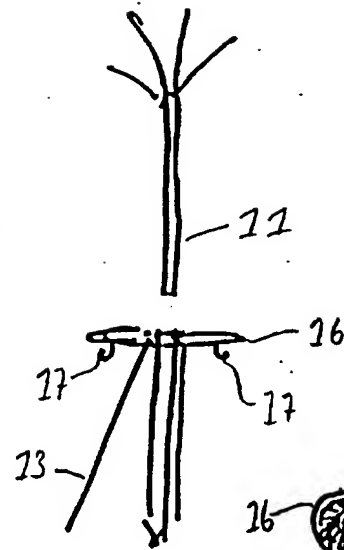


Figure 8

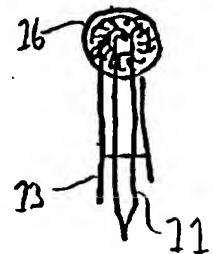


Figure 9



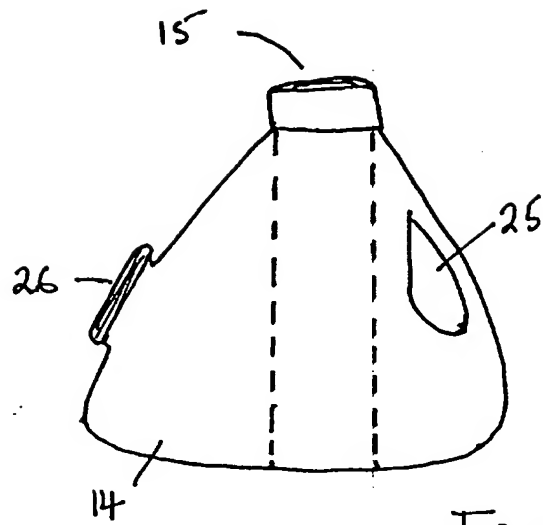


Figure 10

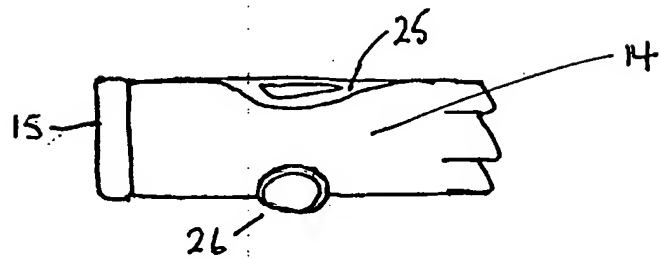


Figure 11

4/4

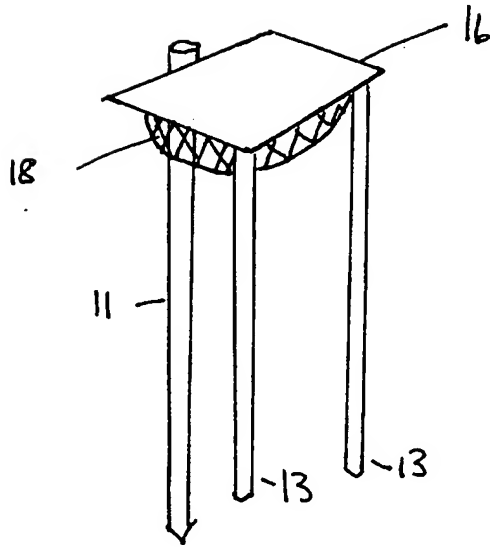


Figure 12

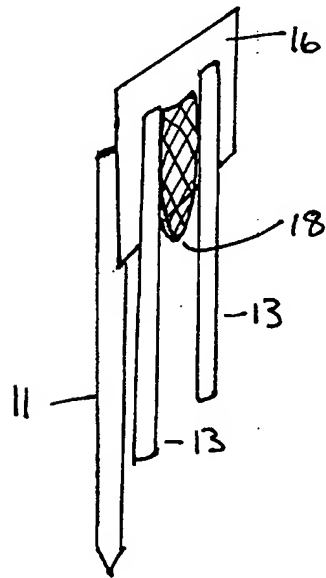


Figure 13

Bathing Tent

The present invention concerns the desire for a rapidly collapsable temporary tent-like structure which is easily transportable and highly adaptable for various uses such as a changing tent at the beach or in the garden or as a portable kiosk for outdoor events, and the term "bathing tent" will be used to define such structures.

According to the present invention a bathing tent comprises a roof formed by a collapsable umbrella and extendable sides provided by a flexible skirt the upper end of which is connected to the outer peripheral rim of the umbrella, a gap in said skirts to provide an entrance to said tent, means for securing the edges of the gap together to close said entrance, and means for brailing up all or part of said skirt to the peripheral rim of said umbrella.

Means can be provided for securing the lower edges of the skirt to the surface on which the tent is erected which can comprise open loops of material attached to the lower edge of the skirt.

Preferably the outer peripheral rim of the umbrella has attached to it a border or pelmet adapted to extend over the upper end of the skirt and to conceal the brailing means and the skirt when brailed up.

The brailing means and the means for securing the gap in the skirts may comprise multiple tie straps attached to the umbrella and skirts in the appropriate positions.

The umbrella can be carried on a support means the lower end of which is provided with a stand and/or is adapted to be driven into the ground.

The support means for the umbrella can take the form of a shaft which can be telescopic or which is in multiple parts which affix to each other by means of screw threads.

The shaft may be supported in the ground either by retractable legs or struts attached to the shaft and/or by a collapsable container which can be filled with liquid or particulate material and which has a reception socket which can be firmly secured to the lower end of the umbrella support.

The supporting shaft can also be provided with a collapsible seat or shelf and or means for hanging small items such as a hook or hooks which can also be affixed to the seat or shelf.

The tent may be constructed from any suitable materials but preferably the shaft and attachments can be constructed from aluminium alloy with the umbrella and skirts being constructed from waterproof nylon and with the tie straps and ground loops being constructed from nylon straps.

The invention may be performed in various ways and several embodiments will now be described by way of example and with reference to the accompanying drawings in which:

Figure 1 is a side view of the tent according to the invention when erected;

Figure 2 is side a view of the tent shown in Figure 1 with the skirt opened to provide an entrance;

Figure 3 is a side view of the tent shown in Figures 1 and 2 with part of the skirt brailed up to provide an open pavilion;

Figure 4 is a view of the upper portion of the tent showing the skirt brailed up;

Figure 5 is a side view of a first embodiment of the shaft of the tent;

Figure 6 is a side view of a second embodiment of the shaft of the tent;

Figure 7 is a side view of a third embodiment of the shaft of the tent;

Figure 8 is a side view of a fourth embodiment of the shaft of the tent;

Figure 9 is a side view of a fourth embodiment of the shaft of the tent as shown in Figure 7;

Figure 10 is a side view of a collapsable container for use with the shaft;

Figure 11 is a side view of the collapsable container as shown in Figure 9 in the collapsed position;

Figure 12 is an isometric view of a seat or shelf provided on the shaft, and;

Figure 13 is an isometric view of the seat or shelf shown in Figure 1 in a collapsed position.

As shown in Figures 1, 2, 3 and 4 a bathing tent according to the invention comprises a roof formed by a collapsable umbrella (1) and extendable sides provided by a flexible skirt (2) the upper end (3) of which is connected to the outer peripheral rim (4) of the umbrella (1), a gap (5) in the skirt (2) to provide an entrance to the tent, means (6) for securing the edges (7) of the gap (5) together to close the entrance, and means (8) for brailing up all or part of the skirt (2) to the peripheral rim (4) of the umbrella (1) the means (6) and (8) can be provided by tapes or loops.

Attached to the skirt are means for securing the lower extents of the skirt to the surface on which the tent is erected, in this embodiment the means comprise loops (9) attached to the lower edge of the skirt.

The outer peripheral rim (4) of the umbrella (1) has attached to it a border or pelmet (10) adapted to extend over the upper end (3) of the skirt (2) and to conceal the brailing means (8) and the skirt (2) when brailed up.

The umbrella (1) is carried on a support means the lower end of which is provided with a stand and is adapted to be driven into the ground. In the embodiments shown in Figures 5 to 13 the umbrella support means comprises a shaft (11) which can be telescopic as in Figure 4 or which is in multiple part which affix to each other by means of screw threads (12) as in Figure 6.

As shown in Figures 7 to 13 the shaft (11) may be supported in the ground either by retractable legs (13) as in Figures 7, 8, 9, 12, 13 and/or by a collapsible container (14) which can be filled with liquid or particulate materials and which has a reception socket (15) which can be firmly secured to the lower end of the umbrella shaft (11).

The shaft (11) can also have affixed to it a collapsible seat or shelf (16) and or a means for hanging small items such as a hook (17) in Figure 8 which is attached to the underside of the seat or shelf (16) or a hanging net (18) suspended beneath the seat or shelf (16) as in figures (12) and (13).

As the support means in the form of the shaft (11) can be telescoped or taken apart and the umbrella collapsed the overall length of the package thus provided can be relatively short.

The umbrella (1) which provides the upper canopy can use the mechanics currently employed for the folding variety of umbrella thus remaining conveniently portable while giving a large diameter of canopy but it could be constructed as the well known type of standard umbrella or parasol canopy with radially projecting arms and supporting stays.

In order to erect the tent it is merely necessary, in the case of soft ground, to extend the shaft appropriately and drive the pointed end into the ground. The umbrella can be expanded before or after placing the shaft in position. The device now provides a sunshade and can be used in the usual way. If it is desired to use the tent for, for example, bathing purposes, the skirt (2) can be unbrailed from the umbrella and allowed to drop to the ground and fixed in position by the loops (9). The tent can be opened or closed by use of the ties (6).

Alternatively the tent can be used as a pavilion by merely unbrailing the rear part of the skirt and retaining the brails at the front so that it operates with the front open as shown in Figure 3.

If desired the collapsible container (14) can also be used by placing it on the supporting surface of the ground into which the end of the shaft has been driven and securing it in position by the reception socket (15) which is provided with clamping means (not shown). This will provide additional support.

Again, if retractable legs (13) are provided these will also act to support the shaft.

If the tent is used on a hard surface then the collapsible support is sufficient to hold the shaft upright by clamping it in position appropriately at the lower end of the shaft.

Thus, the beach umbrella according to the invention provides an easily portable and erectable shelter. It permits the user to change into or out of bathing clothing in privacy even on a crowded beach. It also provides shade and it can provide shelter from rain.

It will be appreciated that the general overall shape of the tent, due to the umbrella shaped canopy and border or pelmet (10) is not unlike the shape of a medieval pavilion and is therefore attractive. The tent can be multi-coloured to enhance this effect, for example by providing striped or shaded patterns on the skirt. It therefore also provides an attractive garden feature. It can be used as a changing tent for outdoor swimming pools and home paddling pools, a shelter for food etc. at barbecues, garden parties, garden fetes and all outdoor functions. It can also be used as a portable kiosk for ticket sellers, stall holders and others at outdoor events such as carboot sales and markets.

Yet a further use is that it can act as a simple and attractive awning or toilet tent for campers and caravaners.

The very simple, familiar mechanics of the use of an umbrella are far easier and less threatening to use than tent based shelters. The device is lightweight and easy to carry, so can be taken anywhere, for example on holidays, and is not dependent on having a vehicle to carry it.

As mentioned above the tent has considerable visual appeal and is styled after 1930's Riviera beach tents and/or medieval pavilions so that it makes a fashion statement as well as acting as a functional item.

As will be seen, the scalloped border or pelmet (10) adds visual appeal and conceals the skirt when this is not in use.

The collapsible container can be rolled up when not in use and has openings to receive any form of fluid-type material, for example a liquid or a particulate material such as sand or small stones. In order to ease transportation a carrying handle (25) is incorporated in its shape and the filling orifice is closed by a stout plug 26.



A set of pegs, for example made from a synthetic plastics material, are provided with the tent to allow the skirt to be fastened down.

A carry bag can be provided to take all the parts and this can have additional pockets so that it can double as a beach bag.

As supplied to a customer the package comprises :-

- a canopy section, folded with skirts brailed up;
- shaft sections or a collapsible shaft, with spike supplied protected by a rubber/plastic ferrule for safety purposes;
- a set of pegs;
- instructions; and the various other items which can be supplied in a bag separately.

The canopy and skirt are preferably made from a lightweight (rain - umbrella grade waterproof Nylon), a shaft of a lightweight material, for example aluminium of minimum weight. The ties would be of Nylon or similar fabric and the pegs, as mentioned above, are a heavy duty synthetic resin material.

The shelf, if provided, can again be made of a synthetic resin material.

## CLAIMS

1. A bathing tent comprising a roof formed by an umbrella which can be opened and closed and having extendable sides provided by a flexible skirt the upper end of which is connected to the peripheral rim of the umbrella, a gap in said skirts to provide an entrance to said tent, means for securing the edges of the gap together to close said entrance, and means for brailing up all or part of said skirt to the peripheral rim of said umbrella.
2. A bathing tent as claimed in claim 1 including means for securing the lower edges of the skirt to the surface on which the tent is erected.
3. A bathing tent as claimed in claim 2 in which said means for securing the lower edges of the skirt comprise open loops of material attached to the lower edges of the skirt.
4. A bathing tent as claimed in claims 1 to 3 in which a border or pelmet is attached to the peripheral rim of the umbrella and which is adapted to extend over the upper end of the skirt to conceal said brailing means and the skirt when brailed up.
5. A bathing tent as claimed in claims 1 to 4 in which the brailing means and means for securing the gap in the skirts comprise multiple tie straps attached to the umbrella and skirts in appropriate positions.
6. A bathing tent as claimed in any one of preceding claims 1 to 5 in which the umbrella is carried on a support means, the lower end of which is provided with a stand and/or is adapted to be driven into the ground.
7. A bathing tent as claimed in claim 6 in which said support means are provided by a shaft.

8. A bathing tend as claimed in claim 7 in which said shaft is telescopic.
9. A bathing tent as claimed in claim 7 in which said shaft is in two or more parts which are adapted to be screw threaded together.
10. A bathing tent as claimed in claims 7, 8 or 9 in which said shaft is provided with retractable support legs or struts.
11. A bathing tent as claimed in claims 7, 8 or 9 in which said shaft is supported on the ground by a collapsible container which can be filled with liquid or a particulate material and which has a reception socket which can be firmly secured to the lower end of the shaft.
12. A bathing tent as claimed in any one of preceding claims 7 to 11 in which said shaft is provided with a collapsible seat or shelf and/or means for having small items.
13. A bathing tent substantially as described herein with reference to and as shown in the accompanying drawings.



INVESTOR IN PEOPLE

Application No: GB 9901717.0  
Claims searched: 1-13

Examiner: Lyndon Ellis  
Date of search: 11 April 2000

## Patents Act 1977 Search Report under Section 17

### Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.R): E1D TL

Int Cl (Ed.7): E04H

Other: Online: EPODOC, WPI, JAPIO

### Documents considered to be relevant:

Category	Identity of document and relevant passage		Relevant to claims
A	GB 2060024	Cascade Electrolite Limited	-
A	GB 2036123	Jiunn-Feng Lee	-
A	US 5172712	Louie A. Robinson	-
A	DE 3604853	Liuni Raffael	-
A	JP11125034	Kawashima Katsuko	-

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

# (12) UK Patent Application (19) GB (11) 2 284 437 (13) A

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(51) INT CL<sup>6</sup>

E04H 15/30

(52) UK CL (Edition N )

E1D DF196 DGS2 D191 D2109 D401 D424 D427

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(56) Documents Cited

GB 2265165 A

GB 2060024 A

GB 2038620 A

GB 2036123 A

GB 1524515 A

US 3860022 A

(58) Field of Search

UK CL (Edition N ) A4P PAA , E1D DF185 DF191 DF194

DF196 DGS

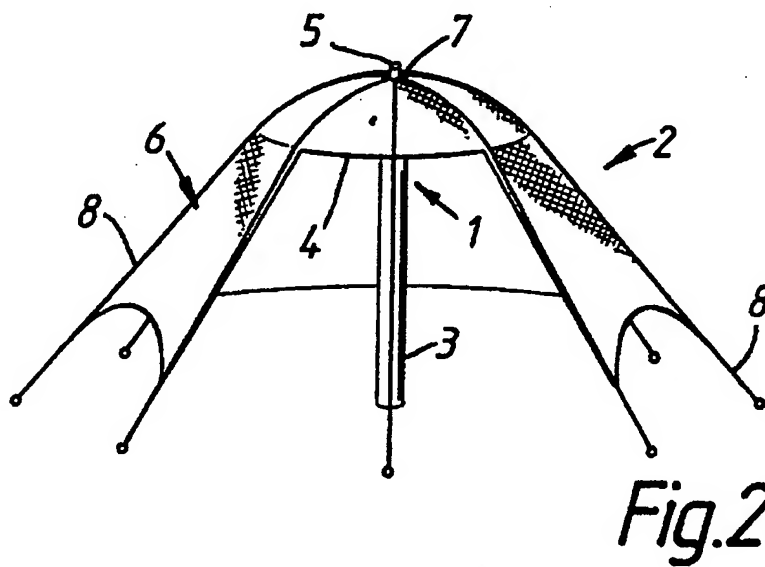
INT CL<sup>6</sup> A45B , E04H

ON-LINE: WPI

(54) Sun umbrella with awning

(57) An umbrella 1 has an awning 2 associated with the covering 4 of the umbrella. The awning includes a canopy 6 associated with the covering 4, attachment means 7 for attaching the canopy to the umbrella in the region of the covering and anchoring means for anchoring the canopy 6 to the ground such that, in use, at least part of the canopy 6 extends outwards beyond and below the covering 4 of the umbrella. The area underneath the region of the canopy which extends beyond the periphery of the covering is at least 50 per cent of the area underneath the covering.

The awning 2 provides increased shade and/or shelter from adverse weather under the umbrella while, because the canopy is anchored to the ground, the stability of the umbrella is not reduced.



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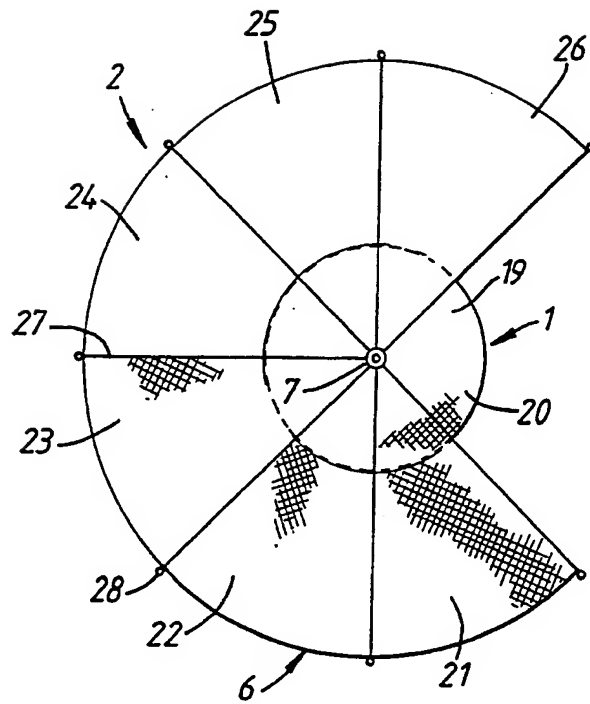


Fig. 4

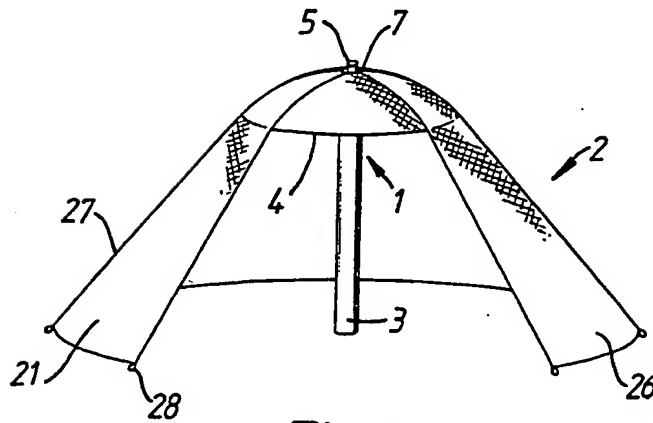


Fig. 5

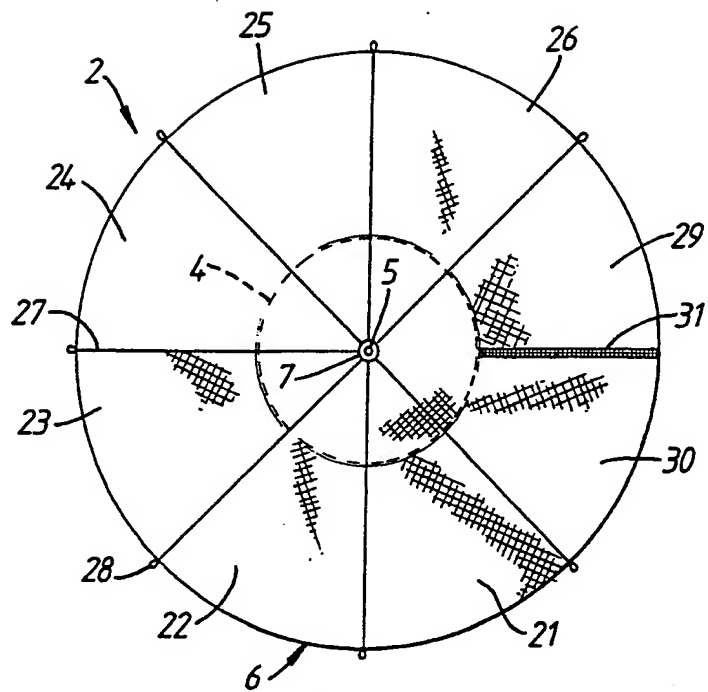


Fig. 6

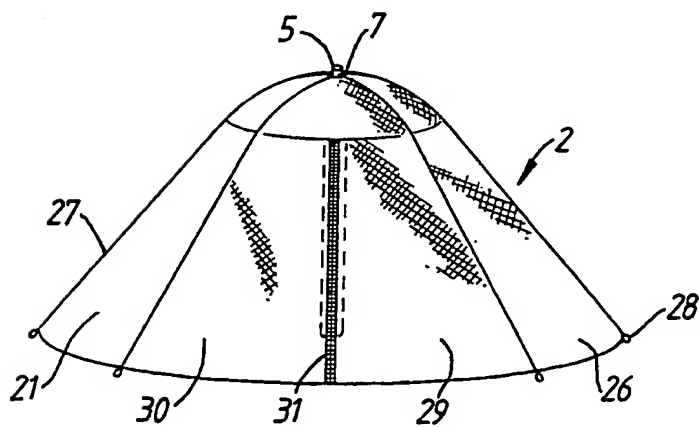


Fig. 7



Improvements in and Relating to Sun Umbrellas

This invention relates to a sun umbrella. More particularly, the invention relates to an umbrella including an awning, and to an awning for use with a sun umbrella.

5 Sun umbrellas are well known and are used to provide shade on beaches, in gardens, parks and outside cafes. The umbrellas comprise a covering stretched across a collapsible frame, the centre of which is attached to one end of a rod which can be fixed to the ground in a  
10 substantially vertical orientation by a variety of well known methods. The rod may be pointed at its lower end and simply inserted into the ground or it may be fitted into a heavy base. The rod may be inserted through a hole in the centre of a table such that when the covering  
15 of the umbrella is erected, the table and people sitting around the table may be shaded from the sun by the covering.

The size of the covering and therefore the amount of shade provided under a sun umbrella is restricted by a  
20 number of factors. If the covering is very large, the umbrella is liable to topple over, especially in a wind. In addition, the radius of the covering is such that, when the umbrella is not in use and the frame is collapsed, the edge of the covering is above the level of  
25 the table, if one is used.

The usual size of umbrella covering is adequate for some purposes, especially if the sun is directly overhead, but on some occasions and especially when the sun is lower in the sky, the shade provided by the umbrella is often inadequate.

It is an object of the invention to provide an umbrella that provides increased shade under the umbrella without reducing the stability of the umbrella.

It is a further object of the invention to provide an umbrella that provides increased shelter from rain and wind under the umbrella without reducing the stability or portability of the umbrella.

According to the invention there is provided an umbrella with an awning associated with the covering of the umbrella, the awning including a canopy associated with the covering, attachment means for attaching the canopy to the umbrella in the region of the covering and anchoring means for anchoring the canopy to the ground such that, in use, at least part of the canopy extends outwards beyond and below the covering of the umbrella, the area underneath the region of the canopy which extends beyond the periphery of the covering being at least 50 per cent of the area underneath the covering. The region of the canopy which extends beyond the periphery of the covering provides increased shade and/or shelter from adverse weather under the umbrella while, because the canopy is anchored to the ground, the

stability of the umbrella is not reduced; indeed it is increased.

Advantageously, the awning is detachable.

Preferably, the canopy is fitted over a projection at or  
5 near the centre of the covering. Preferably, the means  
for attaching the canopy to the projection is a ring  
fixed to the canopy. The ring is easily located over the  
projection, and provides a secure attachment.

Advantageously, the anchoring means are ropes  
10 extending from the periphery of the canopy. Preferably  
the ropes extend from the attachment means to the ground.  
The location of the ropes over the covering of the  
umbrella gives extra stability.

Advantageously, the anchoring means are attached to  
15 the ground by pegs. As discussed below, the ropes may be  
anchored to the ground by a variety of methods. Prefera-  
bly, the length of the ropes is adjustable. The ropes  
can therefore be anchored at a variety of positions in  
the region around the umbrella.

20 Advantageously, the canopy comprises sections which  
are preferably of different sizes. The canopy can  
therefore be orientated such that some larger sections  
face the sun while other smaller sections allow  
ventilation and light under the umbrella.

25 Advantageously, the region of the boundaries between  
the sections is stiffer than the substantial proportion  
of the sections. Those regions may be seams between two

adjacent sections. The presence of those seams increases the stiffness of the canopy in those regions and in some cases increased stability of the canopy may be achieved without the use of ropes described above.

5            Preferably, the size of at least one section is such that, in use, that section of the canopy does not extend beyond the periphery of the covering. That section can therefore be used as a doorway. Preferably, the size of at least one section is such that, in use, the bottom of  
10 that section is substantially at ground level. That section provides a large amount of shade and/or protection from adverse weather.

          If the umbrella and awning are to be used as protection from adverse weather, the size of at least  
15 three quarters of the sections is such that, in use, the bottom of those sections is substantially at ground level.

          Preferably, the size of at least one section is such that, in use, the bottom of that section is beyond and  
20 below the periphery of the covering but above ground level. That section provides increased shade while allowing air to pass freely under the section.

          Alternatively, the size of the sections is such that, in use, substantially all of the bottom of the  
25 canopy is substantially at ground level. Advantageously, at least one section is releasably attached to at least part of one other section. If all the canopy is

substantially at ground level, a fastening means, for example a zip, is preferably provided for the releasable attachment of sections to provide a door in the canopy.

Advantageously, the canopy covers the whole of the covering. That allows easy erection of the umbrella and awning and also the awning can be used with any size of umbrella.

Preferably, the canopy is made from a flexible material. The canopy may comprise a woven fabric which may consist substantially of cotton or nylon or the canopy may comprise plastic sheeting. The canopy may be waterproof. Preferably, at least part of the canopy comprises a transparent material.

The area underneath the region of the canopy which, in use, extends beyond the periphery of the covering is advantageously at least 100 per cent of the area underneath the covering of the umbrella. In such a case the canopy at least doubles the area of shade under the umbrella in the case where the sun is directly overhead.

Advantageously, in use, at least a portion of the part of the canopy which extends outward beyond and below the covering of the umbrella extends outwards and downwards to an angle to the horizontal in the range of 30° to 60°. At such an angle there is a substantial area underneath the extending portion thereby providing a significant increase in shade but there is also a significant lowering of the outward edge of the canopy

towards the ground.

According to the invention there is also provided an awning for use with the covering of an umbrella, the awning including a canopy, means for attaching the  
5 canopy to the umbrella in the region of the covering and means for anchoring the canopy to the ground.

Various embodiments of the invention will now be described by way of example with reference to the accompanying drawings of which:

- |    |                   |  |
|----|-------------------|--|
| 10 | Figure 1          | is a view from above of an umbrella with an awning |
|    | Figure 2          | is a view from the front                           |
|    | Figure 3          | is a view from the side                            |
|    | Figures 4a and 4b | show an alternative form of                        |
| 15 |                   | the awning   |
|    | Figures 5a and 5b | show a further alternative form of the awning      |

The Figures show an umbrella 1 including a detachable awning 2.

20 The umbrella is of a well known type and comprises a rod 3 and a covering 4 on a collapsible frame (not shown). In the centre of the covering 4, extending perpendicularly outwards, is a projection 5.

The awning 2 comprises a canopy 6, the shape of  
25 which, when draped over the covering of the umbrella, is shown in Figure 1. The shape of the canopy can be thought of as essentially a circle divided into a number of

sections 9 to 16, the sections having portions removed from the circumferential edge. A circular ring 7 is fixed at the intersection of the sections of the canopy and is used to attach the awning to the umbrella as  
5 described below.

At the junction of adjacent sections, there are ropes 8 to which the canopy is attached and which extend from the ring 7 radially outwards across the canopy and beyond the edge of the canopy.

10 To erect the awning and the umbrella, the canopy is draped over the covering of the umbrella (that step is more easily performed if the frame supporting the covering is in the collapsed position). The ring 7 is located over the projection 5 and the covering of the  
15 umbrella is erected. To give extra stability to the umbrella, the number of sections of the canopy is the same as the number of arms of the frame of the umbrella (usually eight) and the ropes 8 are located at the arms of the frame.

20 When erected, the awning extends beyond the periphery of the covering of the umbrella. The ropes 8 are fixed to the ground by pegs such as those usually used for erecting tents, and the length of the ropes may be adjustable. It is possible, if the umbrella is to be  
25 erected on a surface into which pegs cannot be driven, for the ropes to be weighted down by stones, or other objects. For that purpose, the ends of the ropes may

include an attachment which may be easily held under the object.

The canopy as shown in Figure 1 is symmetrical, thus sections 9 and 10, sections 11 and 16, sections 12 and 15 and sections 13 and 14 are of the same shape.

Sections 9 and 10 are of a similar radial length as the radius of the covering and thus form a doorway to the area under the awning. Sections 13 and 14 are substantially longer such that, when the covering of the umbrella is erected, they are substantially at ground level. The length of those sections provide increased shade, even when the sun is low in the sky and can also provide shelter from any wind from that direction. The remaining two pairs of sections (sections 11 and 16, and sections 12 and 15) are of intermediate length and therefore provide increased shade while still allowing ventilation and light under the awning.

In the illustrated embodiment the ropes and the canopy extend outwards and downwards beyond the covering of the umbrella at an angle of about  $45^{\circ}$  to the horizontal. The total area underneath parts of the sections 11 to 16 that extend beyond the covering of the umbrella is more than the area underneath the covering of the umbrella so that the canopy more than doubles the area of shade under the umbrella in the case where the sun is directly overhead.

A number of modifications can be envisaged to the



embodiment described above. For example, the canopy may not extend across the covering but may be attached to the ropes 8 at the periphery of the covering, or the canopy may itself be attached to the periphery of the covering.

5 In that way, less material is needed for the canopy.

The material used for the canopy may be any suitable fabric or plastic sheeting that would provide shade, preferably a light material which may be waterproof.

Figures 4 to 7 show alternative designs of the  
10 awning 2. As for the design shown in Figures 1 to 3, the awning 2 comprises a canopy 6 which is draped over the covering of the umbrella, the canopy being divided into a number of sections 19 to 26 (corresponding to sections 9 to 16 of the canopy shown in Figs. 1 to 3).  
15 The awning may be secured to the umbrella using a ring 7 located over the projection 5 of the umbrella as described for Figures 1 to 3. In the case of the awning shown in Figures 4 to 7 the sections 21 to 26 are of substantially the same shape and are of a size such that  
20 when the awning is secured to the umbrella and the umbrella is erected as shown in Figures 5 and 7 the canopy is of a sufficient length that it may be secured to the ground with the lower edge of the canopy being substantially at ground level. The canopy 6 includes  
25 loops of rubber material 28, by means of which the canopy may be secured to the ground using pegs (not shown).  
Extra strength and stability of the awning is obtained by

locating seams 27 in the canopy along the arms of the frame of the umbrella; the seams extend to the lower edge of the canopy and the loops 28 are located at or adjacent to the seams. The seams 27 give extra strength and stiffness to the canopy. Where pegs cannot be inserted into the surface on which the umbrella is erected, alternative methods for securing the canopy may be used as described above.

For the awning shown in Figures 4 and 5, sections 19 and 20 of the canopy are of a similar radial length as the radius of the covering and thus form a doorway to the area under the awning.

In the awning shown in Figures 6 and 7, sections 29 and 30 of the canopy are of a shape similar to that of the sections 21 to 26 and therefore the lower edges of sections 29 and 30 are substantially at ground level when the umbrella and the awning are erected. The adjacent edges of the sections 29 and 30 are releasably joined by means of a zip 31 such that a temporary opening may be formed in the canopy for entry to or exit from the area underneath the canopy. Strings (not shown) may be provided at the seam 27 between sections 26 and 29 and/or at the seam between sections 21 and 30 for tying back the sections 29 and 30 once the zip 31 has been opened, to provide a more permanent opening.

Awnings as shown in Figs. 4 to 7 may be used when increased protection from, for example, rain and wind is

required. Greater protection is provided because most of the sections of the canopy extend to ground level. The arrangement shown in Figs. 4 and 5 may, for example, be used where protection from weather is required while  
5 fishing. In that case the umbrella may be of a type usually used as an umbrella when fishing and may be erected in the usual way; the canopy will be constructed using a waterproof material, at least part of which may be transparent to allow light under the awning.

10       The arrangement shown in Figures 6 and 7 may, for example, be used where privacy is preferred. Such an arrangement may be used, with the zip 31 closed, at the beach as a beach hut.

Claims

1. An umbrella and an awning associated with the covering of the umbrella, the awning including a canopy associated with the covering, attachment means for  
5 attaching the canopy to the umbrella in the region of the covering and anchoring means for anchoring the canopy to the ground such that, in use, at least part of the canopy extends outwards beyond and below the covering of the umbrella, the area underneath the region of the canopy  
10 which extends beyond the periphery of the covering being at least 50 per cent of the area underneath the covering.
2. An umbrella and awning according to claim 1 wherein the awning is detachable.
3. An umbrella and awning according to claim 1 or 2  
15 wherein the canopy is fitted over a projection at or near the centre of the covering.
4. An umbrella and awning according to claim 3 wherein the means for attaching the canopy to the projection is a ring fixed to the canopy.
- 20 5. An umbrella and awning according to any preceding claim wherein the anchoring means are ropes extending from the periphery of the canopy.

6. An umbrella and awning according to claim 5 when dependent on claim 3 or claim 4 wherein the ropes extend from the attachment means to the ground.

7. An umbrella and awning according to any preceding  
5 claim wherein the anchoring means are attached to the ground by pegs.

8. An umbrella and awning according to any preceding claim wherein the length of the anchoring means is adjustable.

10 9. An umbrella and awning according to any preceding claim wherein the canopy comprises sections.

10. An umbrella and awning according to claim 9 wherein the region of the boundaries between the sections is stiffer than the substantial proportions of the sections.

15 11. An umbrella and awning according to claim 9 or 10 wherein the size of at least one section is such that, in use, that section of the canopy does not extend substantially beyond the periphery of the covering.

12. An umbrella and awning according to claim 9, 10 or  
20 11 wherein the size of at least one section is such that, in use, the bottom of that section is substantially at

ground level.

13. An umbrella and awning according to claim 12,  
wherein the size of at least three quaters of the  
sections is such that, in use, the bottom of those  
5 sections is substantially at ground level.

14. An umbrella and awning according to any one of  
claims 9 to 13 wherein the size of at least one section  
is such that, in use, the bottom of that section is  
beyond and below the periphery of the covering but above  
10 ground level.

15. An umbrella and awning according to claim 9, wherein  
the size of the sections is such that, in use,  
substantially all of the bottom of the canopy is  
substantially at ground level.

15 16. An umbrella and awning according to any of claims 9  
to 15 wherein at least one section is releasably attached  
to at least part of one other section.

17. An umbrella and awning according to any preceding  
claim wherein, in use, at least a portion of the part of  
20 the canopy which extends outward beyond and below the  
covering of the umbrella extends outwards and downwards  
at an angle to the horizontal in the range of 30° to 60°.

18. An umbrella and awning according to any preceding claim wherein the canopy covers the whole of the covering.

19. An umbrella and awning according to any preceding  
5 claim wherein the canopy is made from a flexible material.

20. An umbrella and awning according to any preceding claim wherein the canopy comprises a woven fabric.

21. An umbrella and awning according to claim 20 wherein  
10 the fabric consists substantially of cotton or nylon.

22. An umbrella and awning according to any of claims 1 to 19 wherein the canopy comprises plastic sheeting.

23. An umbrella and awning according to any preceding claim wherein the canopy comprises a waterproof material.

15 24. An umbrella and awning according to any preceding claim wherein at least part of the canopy comprises a transparent material.

25. An awning for use with the covering of an umbrella, the awning including a canopy, means for attaching the

canopy to the umbrella in the region of the covering and means for anchoring the canopy to the ground.

26. An awning according to claim 25 and being suitable for use as the awning of the umbrella and awning  
5 according to any of claims 1 to 24.

27. An umbrella and awning substantially as herein described with reference to and as shown in Figures 1 to  
7.

28. An awning for use with an umbrella, the awning being  
10 substantially as herein described with reference to and as shown in Figures 1 to 7.



17

Relevant Technical Fields

(i) UK Cl (Ed.N) E1D DF191, DF185, DF194, DF196, DGS,  
A4P PAA

(ii) Int Cl (Ed.6) E04H A45B

Search Examiner  
J D CANTRELL

Date of completion of Search  
12 JANUARY 1995

Databases (see below)

(i) UK Patent Office collections of GB, EP, WO and US patent specifications.

(ii) ON-LINE: WPI

Documents considered relevant following a search in respect of Claims :-  
1-28

Categories of documents

- |  |   |
|--|---|
| <p><b>X:</b> Document indicating lack of novelty or of inventive step.</p> <p><b>Y:</b> Document indicating lack of inventive step if combined with one or more other documents of the same category.</p> <p><b>A:</b> Document indicating technological background and/or state of the art.</p> | <p><b>P:</b> Document published on or after the declared priority date but before the filing date of the present application.</p> <p><b>E:</b> Patent document published on or after, but with priority date earlier than, the filing date of the present application.</p> <p><b>&amp;:</b> Member of the same patent family; corresponding document.</p> |
|--|---|

Category	Identity of document and relevant passages		Relevant to claim(s)
X	GB 2265165 A	(SHELDON)	25
X	GB 2060024 A	(CASCADE)	25
X	GB 2036123 A	(LEE)	1, 2, 7, 9, 10, 13, 15, 16, 19, 20, 23, 25
X	GB 2038620 A	(ORANGE)	25
X	GB 1524515	(PRESTON)	25
X	US 3860022	(ARNDT)	1, 7, 19-21

Databases: The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).



①9 BUNDESREPUBLIK  
DEUTSCHLAND



DEUTSCHES  
PATENTAMT

⑫ Offenlegungsschrift  
⑩ DE 41 17 800 A 1

⑤1 Int. Cl. 5:  
B 08 B 15/00  
F 16 P 1/00

②1 Aktenzeichen: P 41 17 800.9  
②2 Anmeldetag: 30. 5. 91  
④3 Offenlegungstag: 3. 12. 92

DE 41 17 800 A 1

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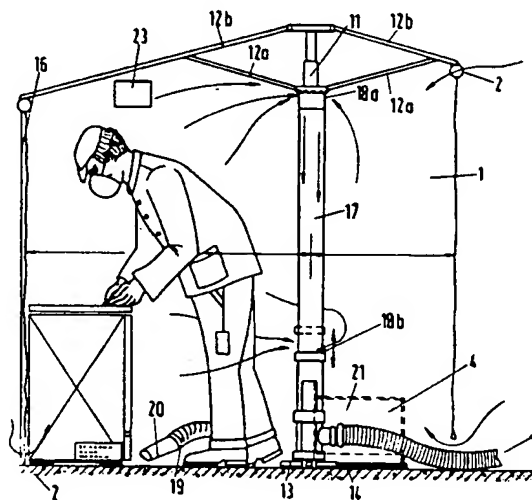
⑦4 Vertreter:  
Voigt, G., Dipl.-Ing., Pat.-Anw., 8500 Nürnberg

⑦2 Erfinder:  
Wentzel, Hans, Dipl.-Ing., 4156 Willich, DE

Prüfungsantrag gem. § 44 PatG ist gestellt

⑤4 Entsorgungshaube

⑤7 Es wird eine Entsorgungshaube beschrieben, die im wesentlichen aus einem Gestell mit Schirm (15) besteht sowie aus seitlichen, bis zum Boden gehenden und einen praktisch geschlossenen Innenraum bildenden, freifallenden Abgrenzungen (16). Der Innenraum weist ein gegenüber dem umgebenden Außenraum verringertes Druckniveau auf (Fig. 1).



DE 41 17 800 A 1

## Beschreibung

Die Erfindung betrifft eine Entsorgungshaube gemäß Oberbegriff des Anspruchs 1.

Die gegebenenfalls notwendige Entsorgung von gefährlichen Stoffen enthaltenden Bauteilen bzw. Aggregaten macht es erforderlich, den von diesen Stoffen beeinflussten Raum klar von den übrigen Räumen abzugrenzen und die übrigen Räume so vor einer Kontamination zu schützen.

Nur beispielsweise sei insoweit auf Elektro-Speicherheizgeräte verwiesen, bei denen asbesthaltige Platten zur Wärmedämmung eingesetzt wurden. Bei der Demontage solcher Speicheröfen sind die "Technischen Regeln für Gefahrstoffe (TRGS) 519" zu beachten, die in Ermangelung einer anderen Richtlinie auch hier anzuwenden sind.

Auf Initiative der Elektrizitätsversorgungs-Unternehmen (EVU) wurden sogenannte Demontagegruppen (Gruppen 1 bis 4) festgelegt, die je nach Gefährdung unterschiedlich strenge Auflagen vorsehen.

Ganz Entsprechendes gilt aber auch bei der Demontage anderer Aggregate, die Gefahrstoffe enthalten.

Es ist daher notwendig, eine sogenannte "Schwarzzone" innerhalb der Räume zu schaffen, um die Räume an sich während des Entsorgungsvorganges vor einer Kontamination zu schützen.

Der Erfindung liegt die Aufgabe zugrunde, eine Entsorgungshaube zu schaffen, die von einer einzelnen Person gehandhabt werden kann und nur einen geringen Platzbedarf beim Transport erfordert.

Die Lösung dieser Aufgabe erfolgt patentgemäß mit Hilfe der Merkmale des Anspruchs 1.

Vorteilhafte Weiterbildungen ergeben sich aus den Unteransprüchen.

Die Erfindung wird nachfolgend anhand der Zeichnungsfiguren beispielsweise erläutert. Es zeigen:

Fig. 1 eine schematische Darstellung einer Entsorgungshaube in der Seitenansicht und im Schnitt sowie Fig. 2 eine schematische Darstellung einer Entsorgungshaube in der Draufsicht.

Die Entsorgungshaube 10 besteht aus einem Ständer 11, Spannarmen 12a und 12b, einem Fuß 13 mit Auslegern 14 und einer Schirmfläche 15. Darüber hinaus sind seitliche Begrenzungen 16 vorgesehen, die zusammen mit der Schirmfläche 15 einen geschlossenen Raum entstehen lassen. Konzentrisch um den Ständer 11 kann ein Abluftkanal 17 mit Abluftöffnungen 18a und 18b angeordnet sein. Dieser Abluftkanal 17 ist mit einer Absaugvorrichtung verbunden, die die kontaminierte Luft aus der Entsorgungshaube — ggfs. über eine Filter- bzw. Abscheidevorrichtung — absaugt. Durch den Absaugvorgang entsteht im Inneren der Entsorgungshaube ein leichter Unterdruck, der sehr erwünscht ist, denn er verhindert das unkontrollierte Austreten kontaminierter Luft aus der Entsorgungshaube in den umgebenden Raum und zieht gleichzeitig Frischluft aus dem umgebenden Raum in die Entsorgungshaube 10.

Um ein gezieltes Absaugen der Gefahrstoffe am Ort des Geschehens — beispielsweise am zu demontierenden Wärmespeicher — zu ermöglichen, kann ein flexibler Abluftschlauch 19 mit seinem Mundstück 20 den jeweiligen Bedürfnissen entsprechend nach dort verlegt werden.

Wie die Fig. 1 erkennen läßt, kann der Fuß 13 des Schirmes 15 mit Auslegern 14 versehen werden, die dann den Schirm gegen Verkippen sichern.

Zusätzlich können Wassertanks 21 auf den Auslegern

14 angeordnet oder dort auch befestigt werden, wodurch die Sicherheit gegen ein etwaiges Verkippen erhöht wird.

Einer dieser Wassertanks 21 kann auch als Tauchbcken ausgebildet sein und der ggfs. erforderlichen Entnahme von Wasser oder dem Eintauchen von zu befeuchtenden Gegenständen dienen. Er hat dann eine Doppelfunktion.

Es hat sich als zweckmäßig erwiesen, den Grundriß des Schirms 15 derart asymmetrisch auszubilden, daß einmal ein relativ großer Arbeitsraum ohne Beeinträchtigung durch den Ständer 11 des Schirms 15 und andererseits ein relativ kleiner Nebenraum unter dem Schirm 15 entsteht. In dem erwähnten Nebenraum sind die Wassertanks 21 und an dessen einer Außenseite eine Schlupföffnung 22 mit hinreichender Überlappung angeordnet.

Eine vorteilhafte Gestaltung der vom Schirm abzudeckenden Grundfläche ist ein Trapez, bei dem der Ständer 11 nahe der kurzen Parallelseite des Trapezes, die Schlupföffnung an der kurzen Parallelseite des Trapezes und die Arbeitsfläche an der langen Parallelseite des Trapezes angeordnet ist. So entsteht ein relativ großer Arbeitsraum ohne Beeinträchtigung durch den Ständer 11 des Schirms 15.

Die seitlichen Abgrenzungen 16 bestehen — um ein möglichst geringes Transportvolumen zu ermöglichen — aus einem flexiblen Material, beispielsweise aus einem textilen Gewebe. Sie können mit verstell- und verschließbaren Überströmöffnungen 23, ggfs. mit Filter-Einsatz, versehen sein oder aber insgesamt aus einem luftdurchlässigen, gazeartigen Stoff bestehen, der einerseits das Hineinströmen von Luft aus dem umgebenden Raum in die Entsorgungshaube und andererseits aber aufgrund eines ausreichenden Strömungswiderstandes auch noch den Aufbau eines Unterdrucks innerhalb der Entsorgungshaube ermöglicht.

Die Innenseiten des Schirms 15 und der seitlichen Abgrenzungen 16 können antistatisch ausgebildet sein.

Bei Bedarf kann der Abluftkanal 17 mit einer oder mehreren Absaugöffnungen 18a, 18b versehen werden, die auch verstell- und verschließbar ausgebildet sein können.

Im Transportzustand läßt sich die Entsorgungshaube 10 zusammenlegen und kann dann recht bequem durch Treppenhäuser und Wohnungstüren transportiert und an der Arbeitsstelle aufgespannt werden. Das notwendige Wasser für die zur Stabilisierung des Schirms 15 erforderlichen Wassertanks 21 steht praktisch in jeder Wohnung zur Verfügung. Die Absaugvorrichtung läßt sich ähnlich wie ein Staubsauger ebenfalls problemlos transportieren und handhaben.

Innerhalb des Arbeitsraums der Entsorgungshaube 10 kann dann die Demontage der gefahrstoffbelasteten Aggregate — beispielsweise einer Elektro-Speicherheizung mit asbesthaltigen Bauteilen — erfolgen, ohne daß der umgebende Raum kontaminiert wird.

Es bedarf keiner weiteren Erläuterung, daß der innerhalb der Entsorgungshaube Arbeitende über die notwendigen Arbeitsschutzgeräte (wie Atemschutz etc.) verfügen muß.

## Patentansprüche

1. Entsorgungshaube, dadurch gekennzeichnet, daß sie aus einem Gestell mit Schirm (15) und seitlichen, bis zum Boden gehenden und einen im wesentlichen geschlossenen Innenraum bildenden, frei

- fallenden Abgrenzungen (16) besteht sowie daß der Innenraum ein gegenüber dem umgebenden Außenraum verringertes Druckniveau aufweist.
2. Entsorgungshaube nach Anspruch 1, dadurch gekennzeichnet, daß der Ständer (11) des Schirms (15) mit einem ihn konzentrisch umgebenden Abluftkanal (17) mit mindestens einer Absaugöffnung (18a, 18b) versehen ist. 5
3. Entsorgungshaube nach Anspruch 2, dadurch gekennzeichnet, daß einige oder alle Absaugöffnungen (18a, 18b) verstellbar und/oder verschließbar sind. 10
4. Entsorgungshaube nach einem der Ansprüche 1 bis 3, dadurch gekennzeichnet, daß die Innenseiten des Schirms (15) und der seitlichen Abgrenzungen (16) antistatisch ausgebildet sind. 15
5. Entsorgungshaube nach einem der Ansprüche 1 bis 4, dadurch gekennzeichnet, daß der Schirm (15) eine asymmetrische Grundfläche abdeckt.
6. Entsorgungshaube nach einem der Ansprüche 1 bis 5, dadurch gekennzeichnet, daß der Fuß (13) des Schirmständers mit abnehmbaren Auslegern (14) versehen ist. 20
7. Entsorgungshaube nach einem der Ansprüche 1 bis 6, dadurch gekennzeichnet, daß am Fuß (13) des Schirmständers ein oder mehrere für den Fuß (13) des Schirms (15) als Ballast dienende Wassertanks (21) angeordnet bzw. befestigt sind. 25
8. Entsorgungshaube nach einem der Ansprüche 1 bis 7, dadurch gekennzeichnet, daß einer der Wassertanks (21) oben offen ist und gleichzeitig als Wasserreservoir und Tauchbecken dient. 30
9. Entsorgungshaube nach einem der Ansprüche 1 bis 8, dadurch gekennzeichnet, daß in der seitlichen Abgrenzung (16) eine Schlupföffnung (22) mit hinreichender Überlappung vorhanden ist. 35
10. Entsorgungshaube nach einem der Ansprüche 1 bis 9, dadurch gekennzeichnet, daß in den seitlichen Abgrenzungen (16) verstell- und/oder verschließbare Überströmöffnungen (23) vorhanden sind. 40
11. Entsorgungshaube nach einem der Ansprüche 1 bis 10, dadurch gekennzeichnet, daß die seitlichen Abgrenzungen (16) aus textilem Gewebe bestehen.
12. Entsorgungshaube nach einem der Ansprüche 1 bis 11, dadurch gekennzeichnet, daß die seitlichen Abgrenzungen (16) aus einem luftdurchlässigen, gazeartigen Material bestehen. 45
13. Entsorgungshaube nach einem der Ansprüche 1 bis 12, dadurch gekennzeichnet, daß die vom Schirm abgedeckte Grundfläche trapezförmig ist, der Ständer (11) des Schirms (15) nahe der kürzeren Parallelseite des Trapezes, die Schlupföffnung (22) an der kürzeren Parallelseite des Trapezes sowie die Arbeitsfläche nahe der längeren Parallelseite des Trapezes angeordnet sind. 50
14. Entsorgungshaube nach einem der Ansprüche 1 bis 13, dadurch gekennzeichnet, daß zusätzlich eine flexible Absaugleitung (19) vorhanden ist, die mit ihrem Mundstück (20) je nach Bedarf verlegbar ist. 55

Hierzu 1 Seite(n) Zeichnungen

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